SECRET

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON, D.C.

REPLY TO ATTN OF: AFOOS

21 December 1961

SUBJECT: USAF Inspector General Survey of SAMOS Systems, 10 April to 31 May 1961

TO: ARDC (General Schriever)

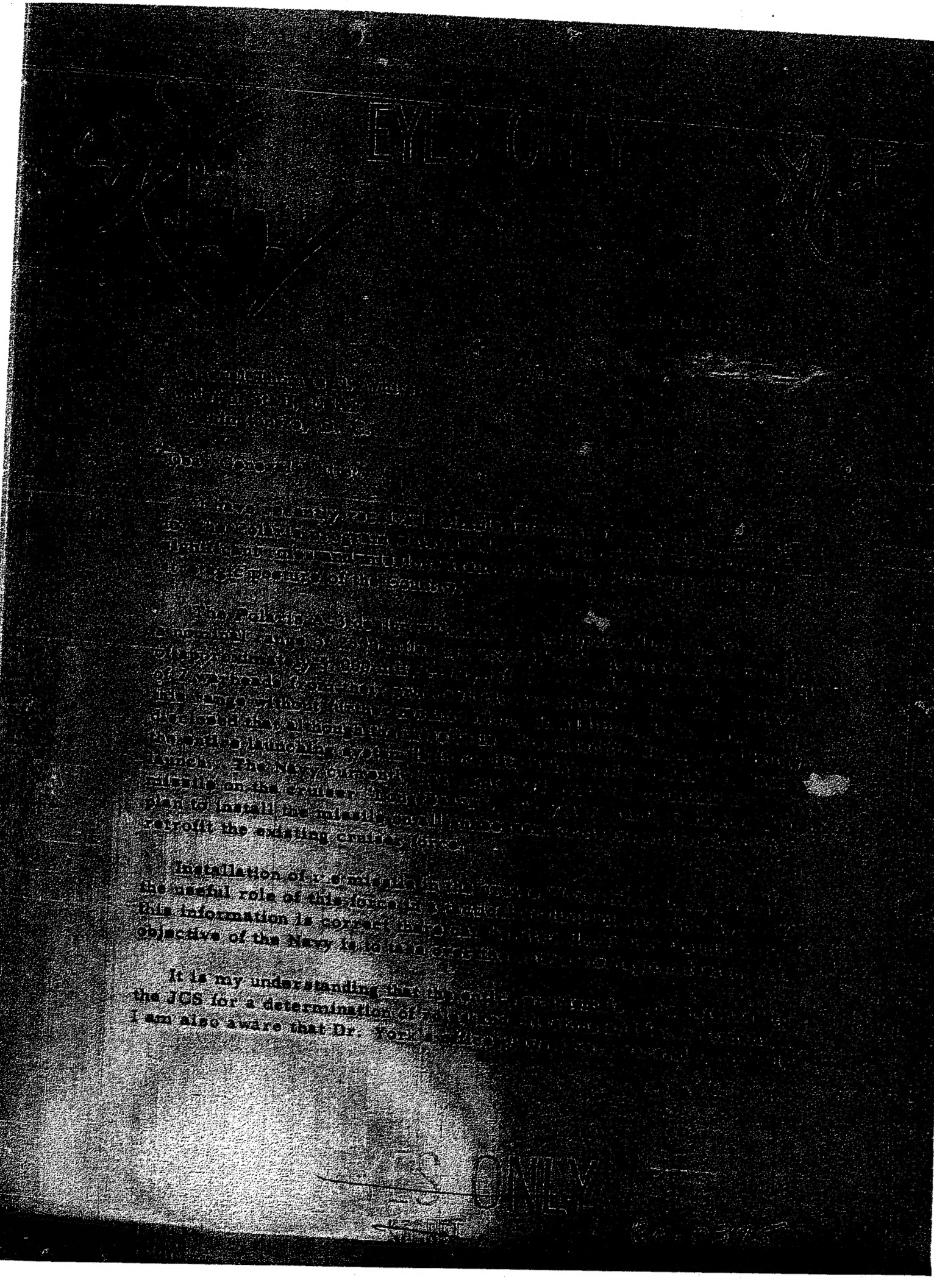
1. Reference is made to your letter of 31 October 1961, subject as above, in which you request my support in the indefinite postponement of this survey.

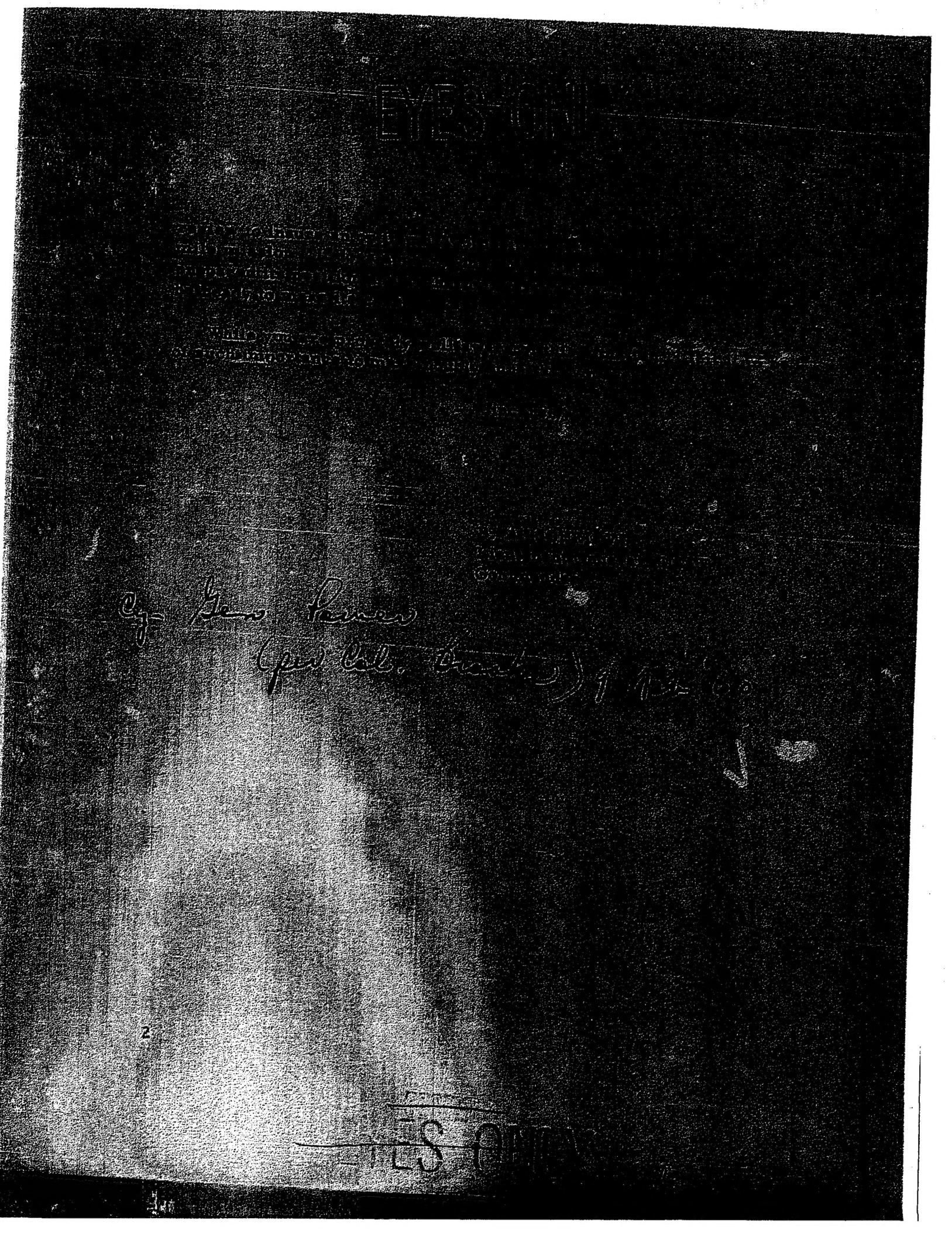
2. I agree with you that any inspection of the SAMOS system should be postponed until management responsibilities have been fully defined and definite channels of direction clearly established. However, after extensive consideration of the problem, it has been concluded that the management reorientation will have been completed and the program sufficiently advanced by April 1961 so that from a management and organizational standpoint, conduct of the survey in the period scheduled should not be unwisely.

3. In view of the importance of this program I am sure you will agree that I must use every proper management tool available to me to insure a totally effective program. Consequently, I have directed the Inspector General to proceed with this survey at the earliest practicable date. In recognition of certain problems which you undoubtedly have in mind and to insure that the scope of the survey is properly planned, General Carroll will be in touch with you and also with General Greer in the near future. The exact timing and scope of the survey will be finalized at that time.

THOMAS D. WHITE
Chief of Staff

SECRET





SECRET

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON, D. C.

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HEADQUARTERS
AIR RESEARCH AND DEVELOPMENT COMMAND
UNITED STATES AIR FORCE
Washington 25, D. C.

SECRET - ES GYE

4. As a by-product of the primary [illegible] it is expected to make [illegible] services will accrue in such fields as [illegible] flood and erosion control, natural [illegible]

A public line which makes the above [illegible] spokesmen preferably in advance of the [illegible] avoid the "Spy in the Sky" theme which [illegible] tends to support the Soviet propaganda [illegible] reconnaissance activities".

SECRET EYES ONLY

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON, D.C.

4 August 1959

Dear Bennie:

I have your memorandum of 1 August and have already talked to you on the phone about the major result, namely, that assignment of General Greer to you as of now. I have also directed that he be given top priority in the assignment of needed assistants. In this connection, I told Greer, who I understand proceed immediately to Patrick, that he should get himself established at his new post, and then have such adequate time as he needs to make an orderly permanent transfer.

As to the Science Advisory Committee to the Secretary of the Air Force, it is my opinion that we have too many advisory committees now, and undoubtedly a new one will be set up here in the Pentagon dealing specifically with SAMOS. I have talked this over with Dr. Charyk and we will keep an eye on the needs in this respect. I am sure that there will be some OSD participation in whatever research and development guidance comes out of the Pentagon and we should not complicate things by setting up a committee on our own at this time. I heard favorably Dr. Kistiakowsky personally welcomed the idea of our naming a Mr. SAMOS.

You mentioned the need to reaffirm the ARDC charter for the conduct of the SAMOS program. I need your further guidance as to just what you want, and I will have a prompt look at it if you will tell me what you have in mind. It has been my impression, and seems to be that of Bim Wilson, that the matter is well in hand presently.

I think we have acted promptly in this matter and I am glad you brought it to my attention. I count on you to keep me informed and give me your suggestions in the future as you have been doing in the past. Best wishes.

Sincerely,

THOMAS D. White
Chief of Staff

Lieutenant General B. A. Schriever
Commander
Air Research and Development
Washington 25, D.C.

Dr. SAMOS

You mentioned the need to [illegible] conduct of the SAMOS program. [illegible] just what you want, and I will do [illegible] are what you have in mind. [illegible] be that of Jim Wilson, that [illegible]

I think we h[illegible] brought it to my attention. [illegible] Give me your suggestions in the [illegible] past. Best wishes.

Lieutenant General [illegible] A. Schriever
Commander
Air Force Systems Command

SECRET

It appears that the [illegible]
[illegible] initial stage of [illegible]
[illegible] relative immunity [illegible]
[illegible] employment with [illegible]
[illegible] and reliable warning [illegible]

There have been [illegible]
past year. The attached [illegible]
composed of outstanding [illegible]
of the AMPAS development and [illegible]
highest priority.

The urgency and importance [illegible]
ments and the reasonable certainty [illegible]
that the concurrent development [illegible]

SECRET

[redacted]

With the proposed [redacted]
and management [redacted]
[redacted] for and [redacted]
[redacted] delays and [redacted]
additions of valuable time [redacted]

I strongly recommend [redacted]
a positive decision to [redacted]
order that the Air Force [redacted]
development and with the [redacted]
this way, we can assure the [redacted]
tection and eleven weapon systems.

ORIGINAL SIGNED
B. A. SCHRIEVER

5 Incls:
1. Memo Sec'y Def
   12 Feb 59 (S)
2. Ltr to CofS (USAF)
   3 Nov 58 (S)
3. Ltr to JCOS
   16 Dec 59 (S)
4. Rep and hoc TAB
   26 Feb 59 (S)
5. Excerpt ad hoc ADS
   15 Jan 59 (S)

SECRET

MEMORANDUM [illegible]

As you [illegible] the [illegible] [illegible] [illegible] technical evaluation and [illegible] agreed upon.

In the past months, the Air Force [illegible] diminished the MIDAS [illegible] development to attain [illegible]

Presentations have been made [illegible] the Ad Hoc Technical Advisory [illegible] program and technical [illegible] tatives from your office. [illegible] Advisory Board have informally [illegible] technical feasibility and [illegible] have both endorsed development [illegible] The Air Force feels that this system [illegible] U. S. early warning network [illegible] cations.

It is my understanding that the [illegible] your approval and augmentation of funds [illegible] the Air Force will reprogram available [illegible] the complete FY 1959 program.

I would like to reemphasize the A[illegible] of development of this system and its [illegible] warning so necessary to air defense and [illegible]

It is requested that expeditious action [illegible] MIDAS program and fund augmentation [illegible] ARPA in order to attain the presently [illegible]

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[illegible]

69-00178

COPY

DRAFT

4. It is strongly recommended that the Baker-Nunn infrared tracking system be transferred

Copy Furnished:
C/S USAF as Exec.
Agent for NORAD

C

O

EVALUATION OF TECHNICAL [illegible]

OF INFRARED [illegible]

FROM SATELLITE [illegible]

Dr. Carl F. J. Overhage, Lincoln [illegible]
Massachusetts Institute of Technol[illegible]
Dr. Sidney Passman, The Rand Corpor[illegible]
Dr. Edward M. Purcell, Harvard Univ[illegible]
Dr. Chalmers W. Sherwin, University [illegible]

26 February 1959

[redacted]

SECRET

Discussion:

Under these circumstances, the development of the attack-alarm system

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P
Y

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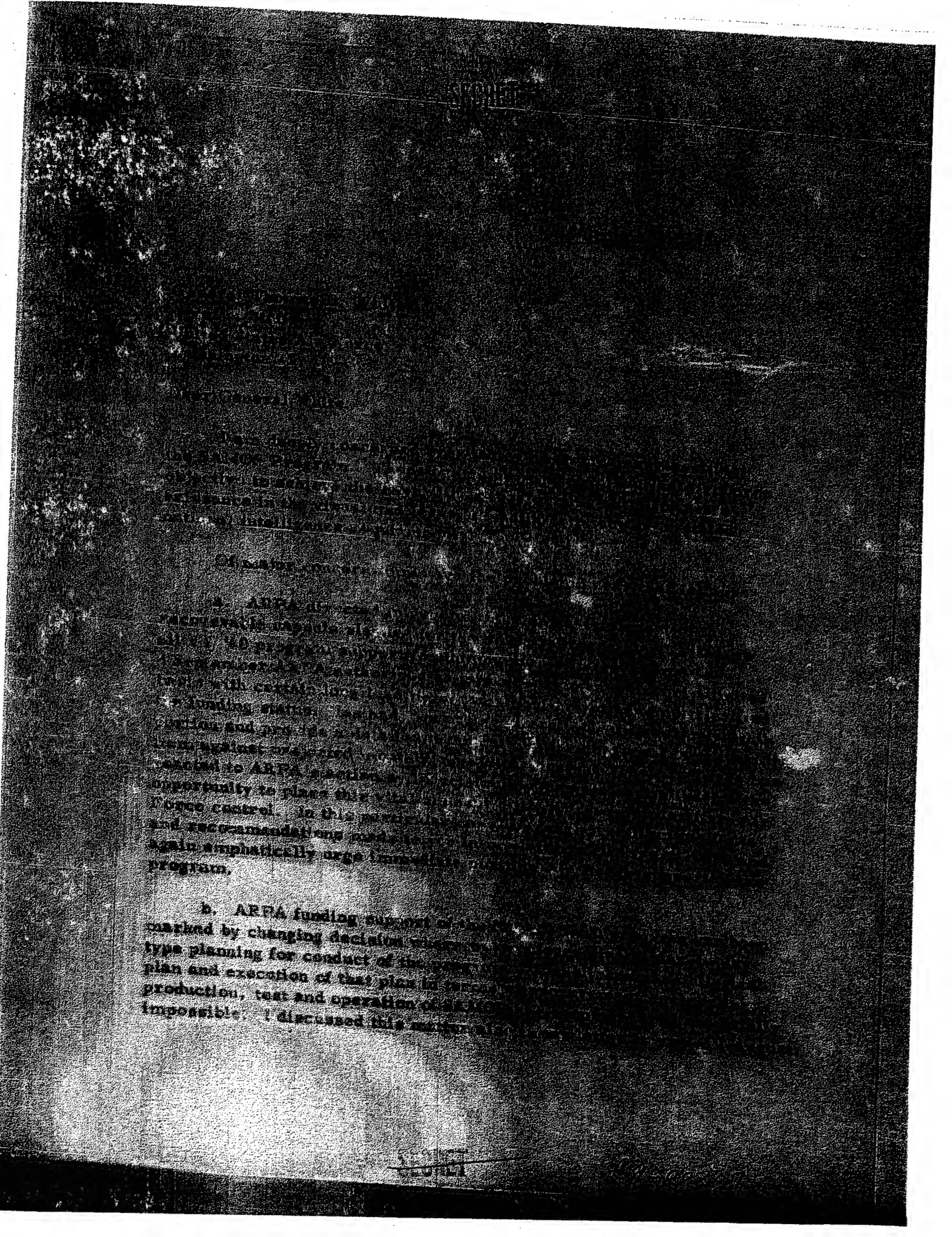

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[illegible]

c. A [illegible] planned availability [illegible] the operating [illegible] a much discussed point [illegible] the Air Council [illegible] stating that Launch Complex [illegible] SAMOS Program [illegible] considerable [illegible] requirements for the operational [illegible] if SAMOS is deprived the [illegible]

d. There is growing [illegible] construction and use of the [illegible] R&D launches are increasing [illegible] launch schedule. Definitization [illegible] at Pt. Arguello for SAMOS will [illegible] becoming clear that operational launch [illegible] that site.

In view of the national importance [illegible] grave impact delayed decisions can [illegible] satisfy national intelligence requirements [illegible] Air Force position be established regarding [illegible] funding actions be taken to permit [illegible] required in support of that position, and [illegible] levels to resolve the AF/Navy positions [illegible] problem.

Sincerely,

B. A. [illegible]
Lieutenant General, USAF
Commander

Cat Field

1. Letter to the Editor

2. Letter to the Editor

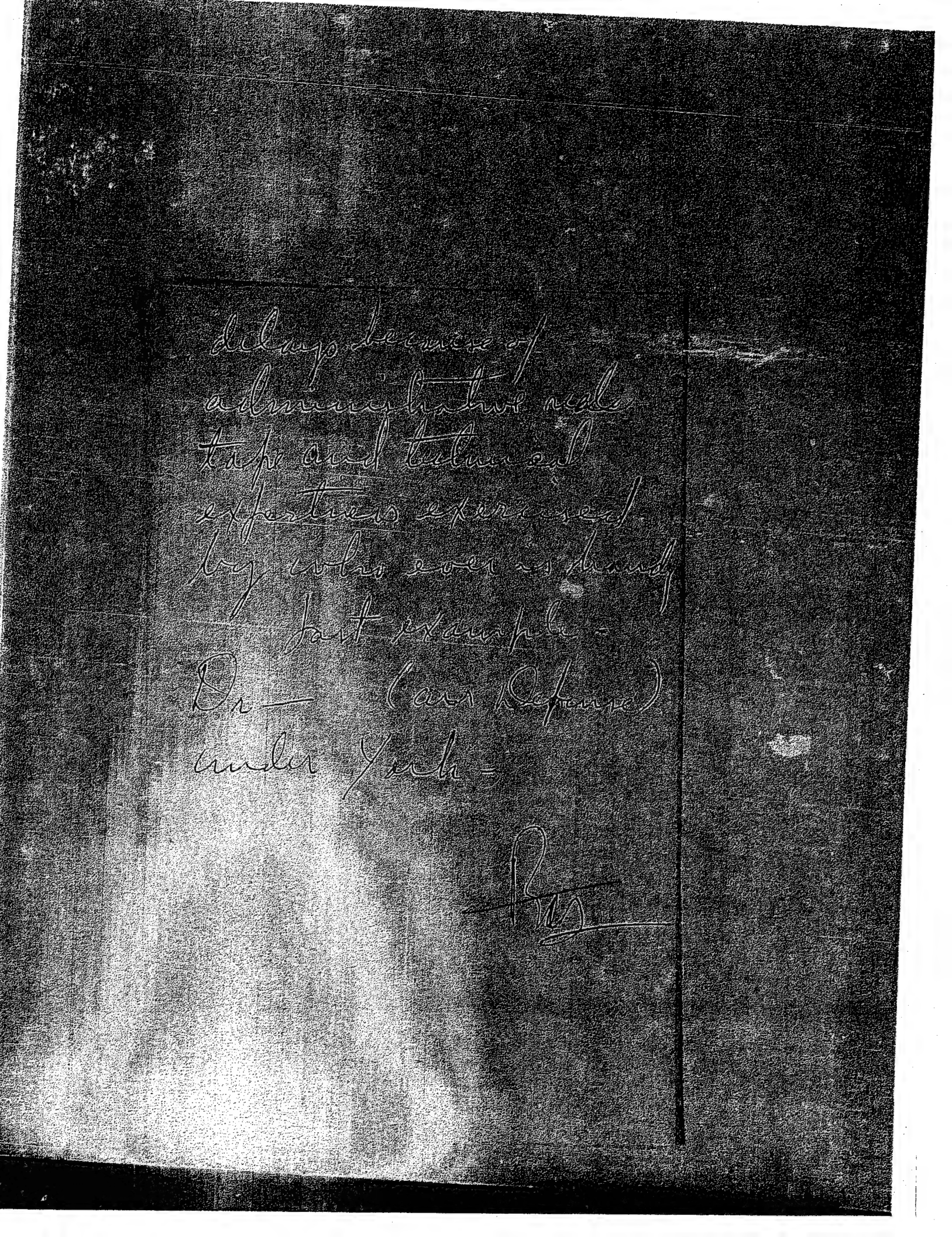
Personal Journal

Setting

a) Library at BM with
an emphasis on current
national history - life
in the 1960s

b) 12-Set - different
way to communicate

c) Tech Terms - Outlined
by introducing concepts
file (reference)
library + Tech Terms



SECRET

AIR FORCE BALLISTIC MISSILE DIVISION
HEADQUARTERS
AIR RESEARCH AND DEVELOPMENT COMMAND
UNITED STATES AIR FORCE
Air Force Unit Post Office, Los Angeles 45, California

REPLY TO ATTN OF: WDZS

SUBJECT: (U) MIDAS-Personal Letter to Dr. York

DATE: 24 AUG 1959

TO: ARDC (Lt General Schriever)
Andrews AFB
Wash 25, D.C.

1. The attached draft of a proposed personal letter to Dr. York has been prepared and submitted in accordance with your desires.

2. Dr. York was given a 20 minute briefing on MIDAS shortly before leaving to AFBMD on 10 August 1959. Material covered included a brief technical and engineering data on which the MIDAS system is based, the design approaches long examined and underway, the technical parameters of the present design concept and why they were chosen, and a description of the research, development and test program and how it will alleviate the problems identified and recognized by LMSD, AFBMD, ARPA and other technical review groups.

3. The inadequacy of the FY-60 funding was covered with Dr. York in summary statements after the briefing. This point was [illegible] the MIDAS is funded at a higher level it must be done at the expense of other program reductions - there are only so many dollars.

CHARLES H. TERHUNE, JR.
BRIGADIER GENERAL, USAF
VICE COMMANDER

1 Atch
Draft Letter to Dr. York (S) WDZS-1, 1c
w/5 atch (1) Rpt of Ad Hoc Tech Adv Bd to ARPA (S) (U) 8563) (2) Excerpts fr Unofficial Rpt of Ad Hoc Com on Adv Def Sys dtd 15 Jan 59, SAB (S) WDZR-1 (3) Memo fr Sec of Def, 12 Feb 59 (S) WDGRU-63, 50 Series A (4) Memo to Comdr, USAFC, subj: (U) Priority on WS 117L Progs for Early Warning, 8 Nov 58 (DWLGAC/Mauch) (5) Ltr to ARDC fr Gen Partridge, subj: WS 117L Integrated Satellite Progs (S)

SECRET

WDZS-5

DRAFT

Dr. Herbert F. York
Director of Defense Research and Engineering
Washington 25, D. C.

Dear Dr. York:

1. I have just learned of the decision to slip some further [illegible] dates on the MIDAS development program which will [illegible] the early attainment of and operational dependability. While [illegible] concern, I have little doubt the advent of [illegible] multiply problem facing [illegible] deter all-out war. The role of the MIDAS, [illegible] associated with our deterrent posture, [illegible] missiles traveling 5,000 miles in approximately 30 minutes, the value of early warning of enemy ICBM launchings has [illegible] through our policy of peaceful aims we have generally conceded the Soviets have the initiative. However, [illegible] attack has been launched exceeds [illegible] missiles, and they know it, they would be [illegible] such an attack. The MIDAS, in conjunction with BMEWS, makes this possible.

2. As early as 1954 the Air Force established at RAND a program of study and experimentation to establish the feasibility of and criteria for a defense [illegible] was established. We realized that the expedited development of the ballistic

WDZS-1

missile must be accompanied by the simultaneous development of a means of determining its use. At that time the Air Force started the program that is transferred to the AFBMD to expedite its development. Since that time the requirements have been defined in detail and the [illegible] by our assessing our own technical advances and technical intelligence on Soviet's activities. During this period all aspects of the MIDAS have been thoroughly studied and evaluated by contractors and the AFBMD, my military staff and technical groups available to me by the AFBMD management structure. I have personally examined the progress made and have been satisfied with the progress made before permitting each successive step that the development process to proceed.

3. The DISCOVERER tests now in progress are adding substantial substantiation of the feasibility of the MIDAS system by providing real numerous real world scientific and engineering data to provide for [illegible] design and reliability improvements in the MIDAS system. In addition, the first MIDAS IR flight package has been delivered and is undergoing extensive laboratory system testing in conjunction with the [illegible] ground gear prior to its first flight test. Although the first [illegible] of operational flight quality it's performance during the extensive ground tests verifies the fact that the performance requirements of an operational system, based on the design concepts used, is well within the capabilities of the present state-of-the-art. These conclusions are shared by technical groups outside the AFBMD who have examined the MIDAS [illegible]. Excerpts from the reports of these groups are attached for your [illegible]

2

4. Considering the urgency of the operational requirements as stated by the Air Force, and verified by letters from CINCNORAD and CINCSAC (copies attached), I am convinced that the early attainment of the MIDAS mission capability and expeditious, timely growth must be made the common goal of the first operational capability by concurrency of development to realize the earliest possible capability in MIDAS, steps must be taken now to provide the industrial bases for the production, operational deployment, logistics, operation and maintenance, command and communications system for this operational capability, the supply and transportation system for the support, training capabilities and instructors, and the early organization and command people to operate the system. This management concept or philosophy, which is based on the ATLAS at AFBMD, provides for the integration of each element of the total weapon system into a single plan, program and budget, and implemented concurrently, consistent with lead-time requirements.

5. MIDAS development plans submitted and presented to the ARPA and the [illegible] associated with these plans have been based on the concept of concurrency for the weapon system. Fund limitations placed on the RTD program in FY-60 and the associated stretch-out will seriously restrict development activities and will delay the early attainment of an operational system. Delay in the approval and appropriate funding of MIDAS in FY-60 and 61 as an operational system based on the concept of concurrency will cause further and even greater delay in the attainment of a capability that is gravely important to the national survival. Technical problems associated with the detection of a ballistic missile against daytime [illegible] and fluctuations are fully recognized as well as the serious [illegible] system of the space system reliability. The development is directed to emphasize the early solution of these

problems which although serious, should be solvable. [illegible] page three

the calculated risks involved [illegible] the data requirements of the Nuclear System Tradeoff

the concept of cost-effectiveness and makes the analyst particularly sensitive to

by the urgency of the requirement, that the systems proposed [illegible]

Sincerely,

5 Atch

1. Rpt of Vol Tdy Mtg Adv Bd to AFSA (S) (U)
2. Excerpts Re Talks of Adhoc Com
3. Memo Dep Sec Def, dtd 17 Jan 59, subj: WDZME-1
4. Memo for Sec of Navy, 12 Feb 59 (S) WDCHO re: 10 Series
5. Memo to Dir, NSA, Subj: (U) Briefing by WS 117L Prog for Tech Warning Ltr, 6 Nov 58 (WDWL-SAC/Memos)
6. Ltr to JCS re Sec Def Determination, subj: WS 117L Improved Satellite Prog (S)

SECRET

5 August 1954

General Thomas S. Power
Commander-in-Chief
Strategic Air Command
Offutt Air Force Base, Nebraska

Dear General:

I am in complete agreement with your letter of 28 July. I will discuss it with General Schriever and we will work in order that we can initiate specific plans to meet the objective you have indicated.

For your information, General Gross is being transferred and assigned to BMD to become [illegible] and will be working out management details for the conduct of the overall reconnaissance satellite program which should be available for your action.

I will see to it that you are completely briefed and constantly kept informed on all aspects of this program.

Sincerely,

B. A. SCHRIEVER
Lieutenant General, USAF
Commander

Sidney:
Show to
Gen. Cooper, Watson
+ Schofield —
Then file one copy
with any comments I have
with the O/S —
Ott

Col Schofield

SECRET

[illegible] General [illegible]
[illegible]
[illegible]
Washington [illegible], D. C.

[illegible] Bennie,

While at Vandenberg AF [illegible] Discoverer Tracking [illegible] [illegible] ted the [illegible] indicated that [illegible] of the SAMOS system [illegible]

During the visit it [illegible] on an informal basis [illegible] gained during the R&D [illegible] personnel. I am [illegible] dictate the eventual [illegible] nevertheless, I still feel [illegible] Force people into the program [illegible] the integrity of existing units [illegible] les trainees while development [illegible] ultimate decision is made, the [illegible] system in the hands of [illegible]

I accept gladly your offer for a briefing [illegible] Washington meetings by your [illegible] haps, at that time an initial [illegible] lem discussed above. However, I [illegible] reviewed very closely by the [illegible] to determine its feasibility without [illegible] interested parties that we are attempting [illegible] ational before the R&D has been fully [illegible]

SECRET

SECRET

MEMORANDUM FOR GENERAL [illegible]

SUBJECT: SAMOS Program

1. Since the [illegible] I have been pushing for an [illegible] program. There have been [illegible] by Dr. Killian under the President's Scientific Advisory Committee [illegible] other headed by Dr. Bill Baker [illegible] purpose of reviewing and evaluating the SAMOS [illegible] they will, in general, be critical in their findings.

2. While we should concern ourselves [illegible] relating to the past are necessary to create the proper perspective. The conduct of our space programs and particularly SAMOS has been extremely difficult at the operating management level. [illegible] and [illegible] have been caught in crossfire of confused direction and guidance [illegible] in the area of organization and technical direction our experience with ARPA was most unsatisfactory. Secondly, in the area of requirements the intelligence community has never quite gotten together. Lastly, in the area of operational control there has been continuing controversy [illegible]. This situation at higher levels, coupled with our problems in the [illegible]

[redacted]

[redacted] Air Force [redacted]

[redacted] industry who would prefer that [redacted] the military. Fortunately, the majority of [redacted] dealing with the government [redacted] think the situation at the moment [redacted] have just listed.

3. In view of this I believe that bold action is required to [redacted] decisions at higher levels which might jeopardize the Air Force role in space. Even more important than Air Force interest is the national interest. Despite any assertion to the contrary, the Air Force possesses at least 75% of the resources and competence which exist in this country for the development of space systems. I think this can be proven by the record of achievement and by an inventory of manpower and facility resources which we have available.

4. I am personally driving to muster and align all available AFSC resources to meet the expanded task. In this connection, I am attaching for your information a recent TWX to General Hilland. This was followed by a series of conferences at AFBMD, including discussions with Dr. Ivan Getting and Ross Gilpatric who respectively are President and Chairman of the Board of Aerospace Corporation. I am confident that the Air Force can do the job better and more quickly than any other government agency. To do so will require full support from all levels in the Air Force.

CONFIDENTIAL - EYES ONLY

[redacted]

B. A. [redacted]
Lieutenant [redacted]
Commander, [redacted]

1 Attachment:
Msg fr ANDVD, 25 July 1960
CO-DZ-6

[redacted]

JOINT MESSAGEFORM

PRECEDENCE

ACTION INFO | DTG | TIME | FROM

AIRCRAFT AND DRONES ARE MDE

TO AIRMD LOS ANGELES, CALIF

INFO

[illegible] TELEGRAPHIC

ADVISE HANSCOM BE MASIZ

SECRET FROM RDC 25-1127

PERSONAL FROM GEN SCHRIEVER FOLLOWING IS SENT

ALTHOUGH WE HAVE NOT RECEIVED [illegible] REPORT

THE SAMOS PROGRAM, IT IS CERTAIN THAT [illegible]

AND PHOTOGRAPHIC PORTIONS WILL BE [illegible]

EFFORTS TOWARD ACCELERATION WILL BE [illegible]

CONVINCED THAT FOR THE COUNTRY [illegible]

FOR ARDC THE SINGLE MOST IMPORTANT [illegible]

THE ATTAINMENT OF RELIABLE RECOVERY [illegible]

ACCOMPLISH THIS WE MUST BRING TO BEAR ON THE [illegible]

BY WHATEVER MEANS NECESSARY, ALL THE RESOURCES

WITHIN ARDC AS WELL AS FROM THE OUTSIDE [illegible]

CLASSIFICATION

DATE 2 | TIME 1250Z

MONTH JULY | YEAR 1960

WRITER

SYMBOL RDG

TYPED NAME AND TITLE (Sign in ink if required)

PHONE

SECURITY CLASSIFICATION SECRET

NR OF PAGES 3

RELEASER

SIGNATURE

SIGNED

TYPED NAME AND TITLE

B. A. SCHRIEVER

Lieutenant General, USAF

Commander

DD FORM 1 MAY 55 173

EDITION OF 1 OCT 48 WHICH WILL BE USED UNTIL EXHAUSTED

DD FORM 1 MAY 55 173-1

CONTINUATION SHEET

SECURITY CLASSIFICATION

FROM:

WE ARE [illegible]

[illegible] COMPREHENSIVE [illegible]

PARTS A, DISCOVERTOR, B, SUITABLE AMV, C, COMPETITIVE SAMOS (ATLAS) OR NEW CARRIER, D, RECOVERY SYSTEM, (FASTEST POSSIBLE) RETARD TO EJECT CAPSULE FROM PARTS A, B, AND C, BOTH ARE THE AMC/DRAG BRAKE. TO PROPERLY MANAGE AND TECHNICALLY DIRECT SUCH A COMPREHENSIVE PROGRAM, CENTRALIZED CONTROL AND OUTSTANDING TECHNICAL PERSONNEL IN ADEQUATE NUMBERS ARE MANDATORY. WE MUST TAKE IMMEDIATE AND EXTRAORDINARY ACTION TO ACCOMPLISH THIS END. AEROSPACE MUST IMMEDIATELY GET INTO THE ACT WITH BOTH FEET. TO DO SO THEY CAN TAKE A LEAF FROM THE R-V BOOK OF 1954. ALSO WADD PERSONNEL HAVE MUCH TO CONTRIBUTE. PARTICULARLY THEY SHOULD BE GIVEN THE BULK OF THE LOADING IN C.I.T.A AND OTHER SENSING EQUIPMENT DEVELOPMENT. PARA 4 I WOULD LIKE FOR YOU TO SET UP TWO CONFERENCES ON 28 AND 29 July/August TO DISCUSS THE MATTERS OUTLINED ABOVE; ONE TO COVER RECOVERY SYSTEMS AND THE OTHER TO COVER RECCE SENSING EQUIPMENT PRIMARILY CAMERA DEVELOPMENT. CONFERENCES SHOULD BE LIMITED TO

SYMBOL

CO-30246

PAGE NR 2

NR OF PAGES 3

SECURITY CLASSIFICATION SECRET

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MESSAGE FORM CONTINUATION SHEET

SYMBOL

	PAGE NR	NR OF PAGES	SECURITY CLASSIFICATION	
ADG	3	3	SECRET	

DD FORM 1 MAY 55 173-1

[redacted]

MEMORANDUM FOR GENERAL [redacted]

SUBJECT: SAMOS Program

1. [redacted] the U-2 incident all levels of [redacted] have been pushing [redacted] program. There have been [redacted] by Dr. Killian under the [redacted] headed by Dr. Bill [redacted] group are reviewing and evaluating [redacted] they will, in general, be critical in the [redacted]

2. While we should concern [redacted] relating to the past are necessary to [redacted] conduct of our space programs and particularly SAMOS [redacted] difficult at the operating management level. [redacted] caught in crossfire of confused direction and guidance [redacted] area of organization and technical direction [redacted] most unsatisfactory. Secondly, in the area of requirements the intelligence community has never quite gotten together [redacted] operational control there has been continuing controversy at JCS level. This situation at higher levels, coupled with our problems in the DISCOVERER

[redacted]

[illegible] has given [illegible]

[illegible] who would prefer [illegible] from the military. Fortunately, the [illegible] have had with the [illegible] Brig. Gen. [illegible] have just begun.

3. In view of this [illegible] decisions at higher levels [illegible] space. Even more important [illegible] interest. Despite any assertion to the contrary, [illegible] at least 75% of the resources and competence [illegible] for the development of space systems. [illegible] the record of achievement and by an [illegible] resources which we have available.

4. I am personally driving to muster and [illegible] resources to meet the expanded task. In this connection, I am attaching for your information a recent TWX to General Ritland. It was followed by a series of conferences at AFBMD, including discussions with Dr. Lyon Getting and Rosa Gilpatric who respectively are President and Chairman of the Board of Aerospace Corporation. I am confident that the Air Force can do the job better and more quickly than any other government agency. To do so will require full support from all levels in the Air Force.

CONFIDENTIAL - EYES ONLY

[illegible]

[illegible] recommend the following [illegible]

[illegible] issuance of a directive [illegible]

[illegible] found and [illegible]

[illegible] the proposed [illegible]

[illegible] Air [illegible]

[illegible], the proposed [illegible]

procedures agreed to by the [illegible]

[illegible]. These encompass [illegible]

[illegible] concept.

c. Establish a Science Adv[illegible]

Air Force to function in a [illegible]

Committee for ballistic missiles.

d. Immediately assign General [illegible]

Also make available several experienced [illegible]

within 48 hours.

5. As to the assignment of General [illegible] opinion [illegible] the

Anderson Study Group recommendations are [illegible]

AFCGM will cease to exist. I believe this opinion is [illegible] other

members of the study group.

B. A. [illegible]
Lieut[illegible]
Comm[illegible]

1 Attachment
[illegible] 25 July 1960
C8-[illegible]

[illegible]

SECRET

[illegible]

[illegible] FROM RDL [illegible]

[illegible] from General [illegible] have [illegible] specific guidance [illegible] photographic [illegible] information will be [illegible] USAF and for ARDC the [illegible] of reliable recovery systems. [illegible] the problem, by whatever [illegible] as well as from the outside. [illegible] should have four parts:

A. DISCOVERER,

B. Current SAMOS E-5,

C. Competitive SAMOS (ATLAS) with new camera,

D. Recovery System (fastest possible) related to but separate from parts A, B, AND C. For example, the AVCO drag brake.

To properly manage and technically direct such a comprehensive program, centralized control and outstanding technical personnel in adequate numbers are mandatory. We must take immediate and extraordinary action to accomplish this end. Aerospace must immediately get into the act with both

SECRET CO-0246

SECRET

30-02-6

SECRET

ADDRESSEE EYES ONLY - SPECIAL HANDLING

HEADQUARTERS
AIR FORCE BALLISTIC MISSILE DIVISION (ARDC)
UNITED STATES AIR FORCE
Air Force Unit Post Office, Los Angeles 45, California

Lt General B. A. Schriever
Hq Air Research and Development Command
Andrews Air Force Base
Washington 25, D.C.

Dear Bem:

During the past two years there have been a number of attempts to develop "cover" for the SAMOS flight program. These proposals have ranged the spectrum from white to gray to black, for example. I know that you will recall Red Sheppard's strong arguments for a white program, Fritz Oder's work on a gray "scientific" program, and the abortive efforts of DOS/P&P, HQ USAF, to make SAMOS completely black.

Next week, the facility booster for SAMOS will go on stand at Arguello. In less than 60 days, the first complete SAMOS will be erected. It will be impossible to conceal this event, and national interest could be triggered sufficiently to force the SAMOS question into the public domain. I don't believe we can afford to gamble on the outcome of such a debate; rather, we should urge all those who are understandable and knowledgeable to act now to develop a SAMOS information and security plan designed to serve the common (national) interest and to pre-empt the offensive, especially as far as public opinion is concerned.

Dick Leghorn has apparently convinced certain segments of the State Department that the SAMOS program as presently constituted should be supported as a national asset. In recent discussions with him, I have been impressed by the novel suggestion that the SAMOS program could be operated effectively on a partly white basis, using the degree of optical resolution as a basic criterion for dividing the program. The plan would call for announcing to the world - particularly to the United Nations Organization - our intention to test space reconnaissance-inspection equipment, using read-out techniques. We would plan to achieve a resolution of about 200 feet (the rough equivalent of the resolution of the LUNK camera, reduced to a 300-mile earth-orbit) at our central readout station and could release samples of these photographs to the scientific community, the international press, interested allies, and to the United Nations. More refined resolution capabilities would disappear into a controlled Air Force program.

ADDRESSEE EYES ONLY - SPECIAL HANDLING

Dick feels that even if this concept is bought, it is vulnerable to political countermeasures. Secondarily, the Air Force should insure that it has a closely held program which can operate in lieu of, or as an adjunct to, an "open" SAMOS program. The [illegible] gambit is ostensibly to cancel the recovery portion of SAMOS and to reinstate it on a clandestine basis. I believe a serious drawback to this concept lies in the fact that it follows patterns already used in the past, and, if recognized, might jeopardize existing programs.

I think Dick should be encouraged in his attempts to get full State Department approval for an "open" SAMOS program. In reviewing the cover plans advanced to date, this appears to have the best chance for success. Last year's DCS/[illegible] effort convinced everyone that attempts to go black are completely out of the question. A gray program would be clumsy to operate and would invite strong criticism from both friend and foe. An all-white program would call for extraordinary - possibly foolhardy - boldness, and would essentially force us to announce the exact nature of all take.

A favorable outcome to the Summit Meetings, with some agreement regarding the beginnings of an arms inspection program, would enhance the credibility of this proposal. As the program progressed one could also explore the potential utility of SAMOS 100-foot resolution data placed at the disposal of the International Disarmament Organization.

Dick Leghorn plans to take this idea forward to a number of his acquaintances in government; he has had some discussions already with Jim Walsh. I trust that you may find these observations useful in your discussions with Dick and others.

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HEADQUARTERS
AIR RESEARCH AND DEVELOPMENT COMMAND
UNITED STATES AIR FORCE
Andrews Air Force Base
Washington 25, D.C.

REPLY TO ATTN OF: RDY

11 July 1960

SUBJECT: MEMORANDUM FOR THE RECORD

TO: General Schriever

1. On the morning of 5 July a briefing was given to selected members of the Air Staff including Generals LeMay, Smart, Wilson and Walsh. On the afternoon of the 5th the SAMOS Development Program was presented to Messrs. Sharp, Charyk, Perkins, and also attending this meeting were Generals Schriever, Wilson, Walsh and Watson. After a discussion of the general Development Program which was in accordance with the guidance provided by Dr. Charyk to the Air Staff, further refined by letter from General Wilson dated 1 June, Dr. Charyk suggested that a discussion of the general parameters of the new SAMOS Development Program be discussed with him on the 6th of July at 1430. Upon returning to ARDC General Watson and Colonel Nunziato met with General Schriever and decided on a specific program to be presented to Dr. Charyk on the 6th of July. This program was discussed with Dr. Charyk, who agreed in essence with our approach as follows:

a. The Air Force would pick up the Discoverer Program in the summer of 1961 (about July) and program the six additional shots that have been authorized. In the meantime, regarding the sixteen shots that are scheduled between July 1960 and June 1961, every effort would be made to improve reliability. Subsequent to June of 1961 consideration would be given to installing a 36" panoramic camera if it is determined to be advisable. This would be based on the success attained in the previous sixteen shots. The transfer of this program to the Air Force is based on a TWX from across the river direct to AFBMD. Concurrently with the Discoverer Program Dr. Charyk authorized that a feasibility study be immediately initiated on the ATLAS Spin Program with STL. This program, if approved, would complement the Discoverer Program.

b. A new Recovery Program would be established using a modified THOR. BMD would analyze and determine the final configuration of the THOR with solid boosters and perhaps elongated tanks. This program would involve a second stage that could be either the ABLE STAR (spin stabilized) or the AGENA. This program would also involve a lifting re-entry vehicle. If the Air Force is permitted to go out on source selection after the meeting with Dr. York on the 18th, it is estimated that a source selection board could complete its findings within sixty days thereafter and that a first shot of this modified THOR could be accomplished in December 1961.

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This new Recovery Program would involve an expanded program of alternate payloads. This new program could include perhaps two re-entry bodies and probably three to four camera configurations. The objective would be to get a ground resolution of at least twenty feet or better. The E-5 package which is part of the old SAMOS Program is scheduled for first firing in September 1961. Since this is also a recoverable package utilizing the AVCO 1800 pound re-entry vehicle, boosted by an ATLAS, the E-5 package would become part of the new Recovery Program.

c. In addition to the programs mentioned above the Air Force would continue with the readout portion of the SAMOS Program as envisioned in the January Development Plan. The E-1 package (100 feet resolution) first firing will occur in September 1960. Three E-1's are scheduled and three are provided as back-up. The E-2 readout package which is scheduled for April of 1961, will give twenty feet resolution. Five are in the present program; however, three are being protected on a lead time basis.

2. It has been ascertained that there are sufficient equipments available to provide exploitation of any intelligence from the R&D take of the E-1 E-2 systems. However, Dr. Charyk did mention that thought should be given to expanding R&D-wise the Subsystem I Program to insure that it will be able to handle not only the take from the early readout R&D program, but also such take that may accrue from the recovery systems. This aspect of Charyk's comments will require further study by BMD. Charyk did mention that a Special Advisory Committee had been established with Dr. Baker, Bell Labs, as the Chairman, to review the overall national satellite program. Indications are that the Committee will conclude its findings before the end of July and will probably submit to the President, in August, an overall national program for the exploitation of satellites for intelligence. This will include not only the basic programs mentioned above but also the method by which the "take" will be handled.

3. In order to provide the back-up to the basic SAMOS Program it was recommended to Dr. Charyk that he approve the additional procurement of five ATLAS and five AGENA vehicles. Dr. Charyk felt that this was a reasonable request.

4. To assure sufficient launch facilities for the expanded SAMOS Program it was recommended to Dr. Charyk that the Air Force immediately initiate action to construct two additional pads and a blockhouse adjacent to SAMOS Pads 1 and 2 at Point Arguello. Modification of Pad 75-1 for Discoverer Program has already been approved; however, the Pad would be further modified to handle the modified THOR at a slight additional cost.

5. It was suggested to Dr. Charyk that General Schriever intended to establish a Special Advisory Committee attached to the Undersecretary of the Air Force's Office, but essentially working with ARDC to assist ARDC in planning for the overall SAMOS Program. Charyk again referred to the Baker Committee and thought that this new committee would be unnecessary.

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of Defense Subcommittee of the House Appropriations Committee [illegible] the 86th Congress (Military Construction) [illegible] indicated that SAMOS is the top [illegible] and I have given the reason for it.

We now have a limited SAMOS research and development program [illegible] in continuity, [illegible] General LeMay and [illegible] of the 12 December [illegible] SAMOS [illegible] all research and development [illegible] nine months and the proposed [illegible] or provide for any operational capability. (Msg [illegible] VC [illegible] and 5541, 16 December 1959)

The philosophy of concurrency should be given added emphasis. This obviously means we should begin to develop operational facilities, as well as research and development facilities, and solve the technical problems as we go along. It should be possible to compress time in such areas as intelligence processing by [illegible] installing prototype equipment [illegible] ARDC [illegible] tion, replacing them [illegible] an R&D/operational continuum [illegible] until an agreed operational date.

As you know ARDC is to provide at Offutt a modest intelligence processing capability known as "Early Fix" to which all intelligence data will be transmitted directly from the [illegible] (as stipulated in AFCVC letter, 15 May 1959). This effort, in direct support of SAC, is to be an aid in filling the gap until an operational system is available. The contract to build the "Early Fix" [illegible] was awarded on 27 April. However, on 19 May I received an information copy of a USAF (AFDAT) message directing ARDC to withhold this effort pending review by the Under Secretary of the Air Force of the proposed overall plan of intelligence data processing facility from "Early Fix."

Continual delays such as these seriously impair our opportunities to obtain data on Soviet ICBM's during the period it is most direly needed.

The SAMOS program requires a strong, centralized, purposeful management. If there were, for example, one Air Force agency

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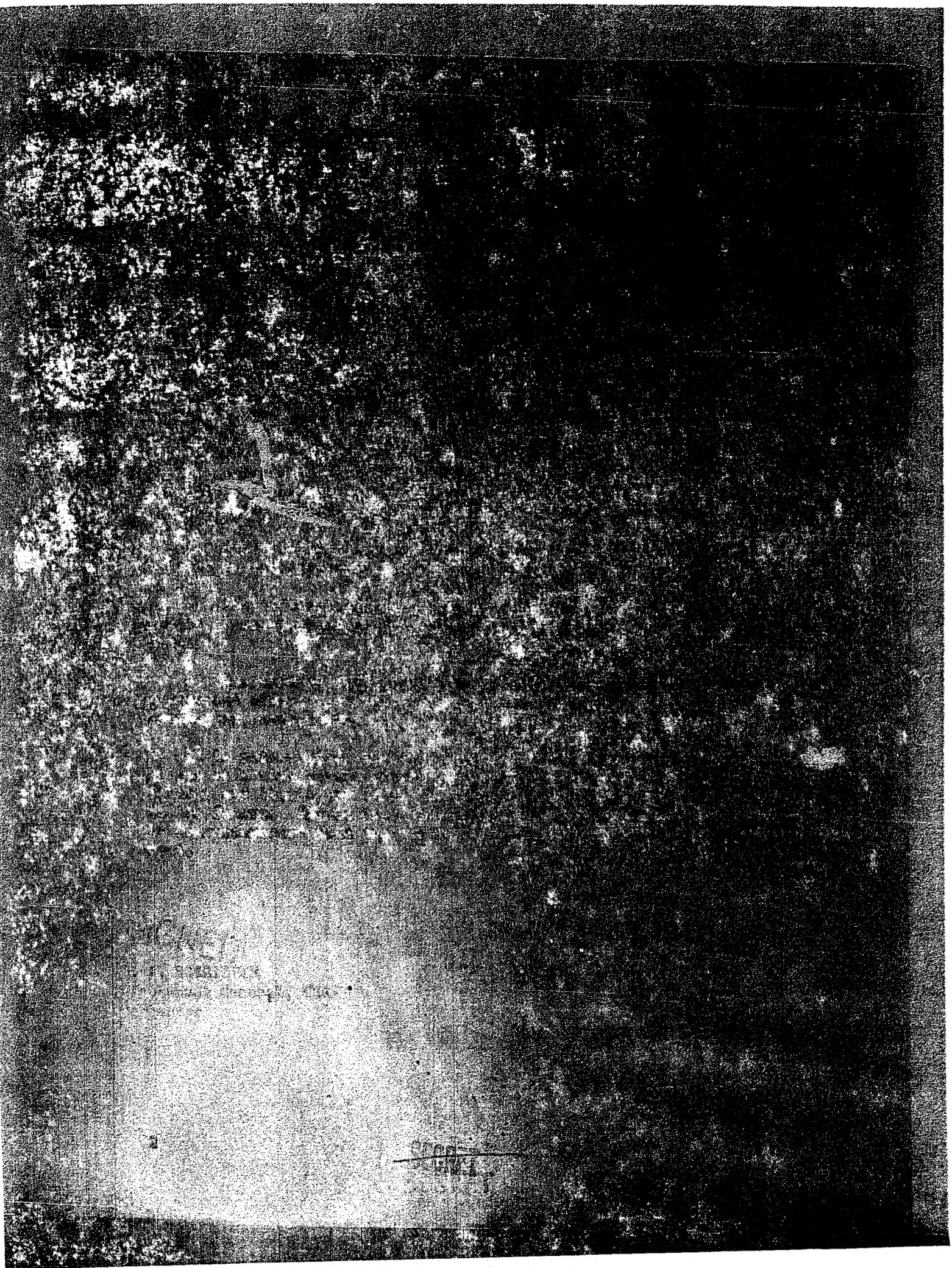
[redacted]

Sincerely

THOMAS S. POWER
General, USAF
Commander in Chief

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